<u>REMARKS</u>

Applicant has carefully studied the Final Office Action of June 15, 2005 and offers the following remarks to accompany the above amendments.

Applicant initially traverses the finality of the current Office Action. Applicant notes "[u]nder present practice, second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement...." MPEP § 706.07(a). The Patent Office has introduced a new ground of rejection for claim 1 that was not necessitated by amendment nor based on information from an information disclosure statement. Specifically, the Patent Office has withdrawn the rejections of claim 1 based on either the combination of Prohaska and Felger or the combination of Itou and Ball. Applicant did not amend claim 1, nor is Applicant the source of the reference used in the new rejection. Thus, it is improper to make the second Office Action final. Applicant requests withdrawal of the finality of the current Office Action.

Claim 13 was rejected under 35 U.S.C. § 112, second paragraph because "the output port" lacked antecedent basis. Applicant herein cancels claim 13, thereby mooting the rejection under 35 U.S.C. § 112.

Claims 1, 3-7, 9, 10, 12, 14-18, and 20-22 were rejected under 35 U.S.C. § 102(b) as being anticipated by Alexander et al. (hereinafter "Alexander"). Applicant respectfully traverses.

Applicant has amended claims 1 and 12 to recite the subject matter of claims 2 and 13 respectively. Claims 2 and 13 are canceled as redundant. The amendment to claim 12 also effectively corrects the antecedent basis problem noted in the rejection of claim 13 under 35 U.S.C. § 112. Claim 20 is amended to include the subject matter of claim 2 as well. The Patent Office admits that claims 2 and 13 are not anticipated by Alexander. This amendment moots the anticipation rejection.

Claims 6 and 17 deserve special mention. Both claims recite that the optical system comprises a dense wavelength division multiplexing (DWDM) system. The Patent Office asserts that this element is shown by Alexander in Figure 2. Applicant respectfully traverses this assertion. Alexander describes his system as a wavelength division multiplexing system (WDM). See, for example, the title, the abstract lines 2 and 4, col. 1, lines 10, 53, and 57, and col. 2, lines 25-27. WDM and DWDM are related, but not the same. Nowhere does Alexander

describe his system as a dense wavelength division multiplexing system. Since Alexander does not show the DWDM of the claims, Alexander cannot anticipate the claims.

Claims 2 and 13 were rejected under 35 U.S.C. § 103 as being unpatentable over Alexander in view of Prohaska. Applicant respectfully traverses. For the Patent Office to combine references in an obviousness rejection, the Patent Office must show that there is a suggestion outside of Applicant's disclosure to combine the references. To show a suggestion to combine references, the Patent Office must do two things. First, the Patent Office must articulate a motivation to combine the references, and second, the Patent Office must support the articulated motivation with actual evidence. In re Dembiczak, 175 F.3d 994, 999 (Fed. Cir. 1999). Once a proper combination is made, to establish prima facie obviousness, the Patent Office must show where each and every element of the claim is taught or suggested. MPEP § 2143.03.

Applicant initially traverses the combination of references as improper because the Patent Office has not complied with the Federal Circuit's directive to supply actual evidence to support a motivation to combine references. Specifically, the Patent Office states that it would be obvious to combine Prohaska into Alexander "to have yet another alternative design choice." This statement lacks the requisite actual evidence. While Alexander does discuss at least two alternative designs, this is not evidence that alternative design choices are needed or desired. Merely because a combination is possible does not equate to a suggestion that the combination is obvious. Since the Patent Office has not substantiated its motivation to combine the references, the combination is improper. Since the combination is improper, the rejection based on the combination is improper. Applicant requests withdrawal of the § 103 rejection of the claims at this time.

Even if the combination is proper, a point which Applicant does not concede, the combination does not establish obviousness. Amended claims 1, 12, and 20 recite that a subset of optical signals are passed through the wavelength select switch and the subset is measured with the power meter. The Patent Office admits that Alexander does not teach this element and relies on Prohaska, Figure 5 to supply the missing element. However, Prohaska does not teach the missing element. Specifically, the text of Prohaska in paragraph 0018 clearly indicates that only a single wavelength (λ_l) is selected and applied to the device. The remaining wavelengths are unaffected. Likewise, Figure 5 only shows one wavelength passed out of the device. To this extent, Probaska does not teach the element for which the Patent Office has cited Probaska. Since the references individually do not teach or suggest the claim element, the combination of references cannot teach or suggest the claim element. Since the combination does not teach or suggest the claim element, the combination does not establish obviousness. Since the combination does not establish obviousness, the claims are allowable. Applicant requests withdrawal of the § 103 rejection of the claims for this reason as well.

Claims 11 and 23 were rejected under 35 U.S.C. § 103 as being unpatentable over Alexander in view of Prohaska and further in view of Fujiwara et al. (hereinafter "Fujiwara"). Applicant respectfully traverses. The standards for establishing obviousness are set forth above.

Applicant initially traverses this rejection for all the reasons set forth above regarding amended claims 1 and 12. Nothing in Fujiwara cures the problems set forth above. Thus, since claims 11 and 23 depend from allowable claims, claims 11 and 23 are also allowable.

Applicant further traverses the rejection because the Patent Office has not properly supported its motivation to combine the references. Specifically, the Patent Office asserts that the motivation to combine the references is "to control the gain of the optical amplifier." This asserted motivation lacks the evidentiary support required by the Federal Circuit. Since the motivation lacks the proper evidentiary support, the motivation is improper. Since the motivation is improper, the combination is improper. Since the combination is improper, the rejection based on the combination is improper. Applicant requests withdrawal of the § 103 rejection of claims 11 and 23 for this reason as well.

Applicant requests withdrawal of the finality of the Office Action and reconsideration of the rejections in light of the amendments and remarks presented herein. The Patent Office's combinations are not properly supported, and the references do not show all the claim elements. Applicant earnestly solicits claim allowance at the Examiner's earliest convenience.

Respectfully submitted,

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